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 TI **Magnesium** alloys for die-casting
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 SO Jpn. Kokai Tokkyo Koho, 3 pp.
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AB The Mg alloys contain Ca 0.2-4, Al 1-6, Si 0.5-1.5, Mn 0.15-0.5, Zn \leq 0.3, Cu \leq 0.06, Ni \leq 0.03, and impurities \leq 0.3%. Addition of Ca to Mg-base alloy containing Si \geq 0.5% increases the creep-rupture resistance. Thus, die-cast Mg alloy (containing Ca 0.52, Al 3.9-4.2, Si 0.8-1.3, and Mn 0.24-0.28%) showed tensile strength 21.8 kg/mm² and elongation 8.0%. The rupture time was 3.7 h with elongation 11.3% in creep-rupture tests at 250° with tensile stress 5.5 kg/mm².

1-6 Al

0.2-4 Ca

0.5-1.5 Si

Zn

Mg